

DISCUSSION OF THE CLAIMS

Claims 14-27 and 31-40 are pending in the present application. Claims 1-13 and 28-30 are canceled claims. Claims 14-24 and 36-37 are presently withdrawn from active prosecution. Claim 40 is amended herein for matters of form.

No new matter is added.

REMARKS

Applicants thank the Office for withdrawing the rejections set forth in the November 4, 2009 Office Action.

The Office newly rejected the claims as obvious over Glenn (U.S. 6,235,683) in view of Long (U.S. 5,392,559). The Office concedes that Glenn does not disclose a surfactant-free aqueous suspension that includes hydrophobic nanostructured particles of at least one of a metal, a polymer and mixtures thereof. The Office relies on Long to correct this deficiency of Glenn. Applicants traverse the rejection on grounds including (i) the allegedly obvious inclusion of the polymer particles of Long in the composition of Glenn does not meet the present claim requirements, and (ii) those of skill in the art would not be motivated to include the Long particles in the Glenn composition for the reason that such a combination would compromise the functionality of the Glenn composition.

Present Claim 25 recites two features that are contradictory to the Long disclosure and thus inclusion of the Long particle in the Glenn composition does meet the present claim limitations. For example, the claimed aqueous suspension (i) must be “surfactant-free” and the hydrophobic nanostructured particles therein (ii) must have an average diameter of “from 30 to 100 micron”. The Long composition is contradictory to both of these features of present Claim 25.

If one assumes that the Office’s allegation that it would be obvious to modify Glenn in the manner of Long were correct (Applicants make no such admission), one would include the Long surfactant (aka stabilizer, dispersing agent and wetting agent) together with the Long polymer particle in the Glenn composition. Of course, the inclusion of a surfactant in the Glenn composition would violate the requirement of the present claims that the composition is “surfactant free”.

Long makes it clear that a surfactant must be included with the polymer particle of the Long compositions (see column 16, lines 42-55). Long nowhere discloses or suggests that a useful polymer particle-containing composition can be obtained in the absence of a surfactant.

The Office's assertion that one of skill in the art would arrive at the presently claimed invention by modifying Glenn in the manner of Long is thus not supportable.

Even if one were to assume that those of skill in the art would find it obvious to include the Long polymer particle in the Glenn composition (Applicants make no such admission), such a combination would not lead to the presently claimed invention. As mentioned above, the hydrophobic nanostructured particles of present Claim 25 must have an average diameter of 30-100 micron. The Long particle is different and has a maximum particle size of 0.5 microns (see for example column 6, lines 23-25 and column 16, lines 42-55). Long nowhere discloses or suggests that generic polymer particles are useful. Long makes it clear that the polymer particles must have a small particle size in order to be useful (see for example column 6, lines 23-28).

The Office's assertion that one of skill in the art would arrive at the presently claimed invention by modifying Glenn in the manner of Long is thus further not supportable.

In addition to the reasons discussed above, the Office's assertion that it would be obvious to modify Glenn in view of Long is even further not supportable for the reason that such a modification would detrimentally effect the functionality of the Glenn composition. For example, the Glenn method is one that is used to obtain enhanced super cooling of plants for frost protection (see the title of Glenn). Such a process must necessarily coat all of the surfaces of a plant, especially the leafy surfaces which are most susceptible to frost (see the figures of the Glenn patent). In contrast, the method and composition of Long is useful only on surfaces having an inclined angle (see column 5, lines 35-51). Long describes application

of the composition only insofar as it applied to vertically oriented surfaces such as the bark or trunk of a tree (see Figure 1 of Long). This stands in stark contrast to the composition of Glenn which is used on the leafy surfaces of a plant which are susceptible to frost.

Those of skill in the art would not modify Glenn in the manner of Long. Even if it were obvious to make such a modification (Applicants make no such admission), it would provide a surfactant-containing composition that includes polymer particles having a size of 0.5 microns or less. These requirements are in contradiction to the presently claimed invention which is “surfactant free” and includes hydrophobic nanostructured particles having a particle size of 30-100 microns. Moreover, it would make no sense to use the composition of Long on the flat leafy surfaces of a plant in view of Long’s disclosure that the Long composition is useful only on vertically inclined surfaces.

Applicants thus request withdrawal of the rejection.

REQUEST FOR REJOINDER

Upon allowance of Claim 25 Applicants respectfully request rejoinder and allowance of any withdrawn claims which depend from Claim 25.

Applicants respectfully request withdrawal of the rejection.

Respectfully submitted,

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